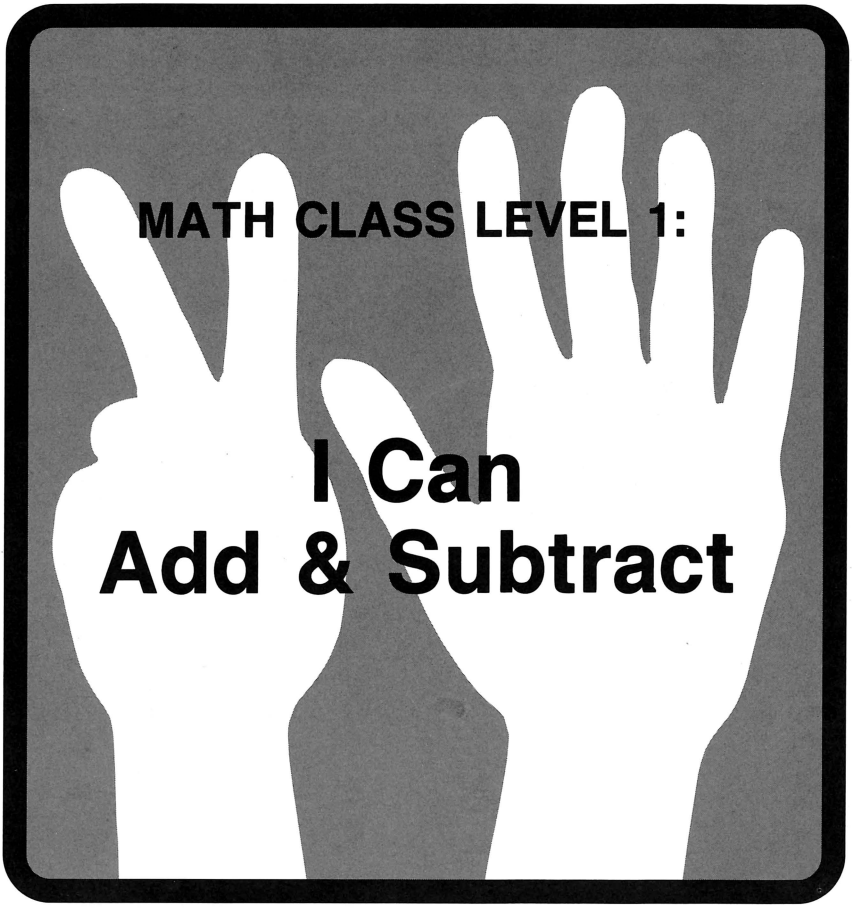
CH I

Troll MICRO

COURSEWARE

USER'S GUIDE



MATH CLASS LEVEL 1:

I Can Add & Subtract

Troll Micro-Software

Troll Math Class
Level 1: I Can Add & Subtract
Micro User's Guide

System Requirements

1. Apple IIc, IIe, II+, or II (with Applesoft and at least 48K of RAM).
2. One disk drive.
3. A TV set or video monitor (color is recommended).

How to Use This Program

Troll Math Class is designed to introduce students to basic math skills in a format that is entertaining as well as educational. Each level focuses on a specific concept and includes a variety of activities to teach and reinforce that skill. **Level 1: I Can Add & Subtract** introduces simple addition and subtraction skills using the numbers 0-10.

Getting Started

Insert the program disk into the disk drive with the label facing up and the oval cutout facing away from you. Close the door on the disk drive and turn on the monitor and computer. The red light on the disk drive will light up as the program loads.

NOTE: Some Apple computers require that PR#6 be typed before the program begins loading.

When the program has loaded, the Troll logo will appear, followed by the title. Then the first menu appears:

1 Addition
2 Subtraction

The student presses 1 (for addition) or 2 (for subtraction). Then one of the following menus appears:

Addition	**Subtraction**
1 Toy Parade	1 Martians
2 Toy Box	2 Blast Off
3 Number Go-Round	3 Saturn's Moons
4 Jungle Safari	4 Space Safari

To choose an activity from the menu displayed, student simply presses the number of that choice.

Special Keys

	H	**Help**
CONTROL	X	**Return to First Menu**
CONTROL	O	**Turn Sound On or Off**

The Addition Activities

Toy Parade (Intro/Review)
Objectives: Count 1-10 objects.
In this activity, the numbers 1 to 10 are reviewed. First one toy marches onto the screen, and the student presses a number key to indicate how many. Then two toys, then three toys, etc.

Toy Box (Tutorial/Drill)
Objectives: Understand the addition process; add sets of numbers.
Addition of single digit numbers with sums up to and including 10 is carried out in a toy box setting. As toys march across the screen, the student counts the number in each set, adds the numbers, and enters the sum.

Number Go-Round (Drill)
Objectives: Find sums to 10.
An animated number wheel is used to present addition problems using single digit addends.

Jungle Safari (Application)
Objectives: Use addition skills to complete a maze.
Moving through a jungle maze, a traveler comes upon randomly generated addition problems.

The Subtraction Activities

Martians (Intro/Review)
Objectives: Understand the concept of subtracting one from a number.
In this activity, Martians are removed from a group, one by one. The student enters the number that completes each equation from $10 - 1 = \square$ to $1 - 1 = \square$.

Blast Off (Tutorial/Drill)
Objectives: Find differences by subtracting numbers.
Subtraction of single digit numbers is carried out in a rocket launch pad setting. Students count a number of rockets, watch a given number blast off, then enter the number remaining.

Saturn's Moons (Drill)
Objectives: Find differences by subtracting numbers.
A number wheel is used to present various subtraction problems using single digit numbers and the number 10.

Space Safari (Application)
Objectives: Use subtraction skills to complete a maze.
In a space maze, alien creatures appear, along with subtraction problems that involve the numbers 0-10.

Care of Disks

The micro-software program is recorded on the magnetic coating of the program disk, which is permanently sealed inside a protective cover. Do not touch the surface of the disk that is visible through the oval cutout in the protective cover. When the disk is not in use, it should be returned to its own envelope and stored in a safe place away from dust, magnetic fields, and temperature and humidity extremes. Do not bend, staple, or write on the disk or its protective cover with ball point pen or pencil.

Warranty

Troll Associates provides a lifetime guarantee on Troll micro-software disks. If any program disk is accidentally damaged or ever fails to load or run, simply return it to us for a free replacement.

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